Day 2: Lines

Lines standards:

6.2.A - C

7.2.F & G

8.1.C - E

Goals

1. Determine when it’s appropriate to use a linear model.
2. Determine appropriate dependent and independent variables.
3. Interpret concepts of slope, x-intercept and y-intercept.
4. Express a linear relationship using an equation.
5. Make inferences using a linear model.

**Part 1: Wrap Up Stats at Grade Level OR work on theoretical probability (30 min – 1 hr)**

**Part 2: Cell Phones**

You. You have a cell phone with 500 free minutes and you pay .10 a minute after that. You pay $40 per month.

Grandma. Your grandma gets a cell phone just for emergencies, so she doesn’t have any free minutes. She pays $20 per month and .25 a minute for each call.

Your step-nephews drug dealer.

**Part 3: U of NM Enrollment Data**

**Part 4: Linear Depreciation with Given Equation**

A business owner wants to use a tax write-off for his office equipment. He is using a linear equation y = 2500 – 200x to calculate the value of the equipment, y, for each year, x, he has owned the equipment.

Part A:

1. Sketch the graph of the equation.
2. Find the y-intercept. What does it mean?
3. Find the x-intercept. What does it mean?
4. What the value of the equipment after he’s owned it for years?
5. What is the slope? What does the slope mean?
6. What is the value after he’s owned it for 13 years?

Part B:

1. Discuss answers from above.
2. State the domain and r